

A. CLAIMS

I claim:

- 5 1. A method of increasing the solubility of
a protein of interest produced in a host cell
comprising expressing the protein as a fusion protein
with a 14-3-3 protein.
- 10 2. The method of claim 1 wherein the protein
of interest is selected from the group consisting of:
extracellular domains of membrane-bound receptor
proteins, cytokines and cytokine-like proteins,
neurotrophins, and metalloproteases.
- 15 3. The method of claim 1 wherein the host
cell is a prokaryotic cell.
- 20 4. The method of claim 3 wherein the
prokaryotic cell is a bacterial cell.
5. The method of claim 4 wherein the host
cell is an *E. coli* cell.
- 25 6. A method of increasing the solubility of
a protein of interest produced in a host cell
comprising expressing the protein as a fusion protein
with a GF-14 polypeptide.
- 30 7. The method of claim 6 wherein the GF14
polypeptide is GF-14R and is encoded by the nucleic
acid molecule of SEQ ID NO: 38.
- 35 8. The method of claim 6 wherein the fusion
protein contains a linker peptide.

10. The method of claim 7 wherein the host cell is a prokaryotic cell.

12. The method of claim 11 wherein the host cell is an *E. coli* cell.

14. The nucleic acid molecule of claim 13 further comprising at its 5' or 3' end, a nucleic acid molecule selected from the group consisting of nucleic acid molecules encoding: an extracellular domain of a membrane-bound receptor protein, a cytokine or cytokine-like protein, a neurotrophin, and a metalloprotease.

Figure	Chemical Structure	Compound Name
1		1,2,3,4,5,6-Hexachlorocyclohexane
2		1,2,3,4,5,6-Hexachlorocyclohexane
3		1,2,3,4,5,6-Hexachlorocyclohexane
4		1,2,3,4,5,6-Hexachlorocyclohexane
5		1,2,3,4,5,6-Hexachlorocyclohexane
6		1,2,3,4,5,6-Hexachlorocyclohexane
7		1,2,3,4,5,6-Hexachlorocyclohexane
8		1,2,3,4,5,6-Hexachlorocyclohexane
9		1,2,3,4,5,6-Hexachlorocyclohexane
10		1,2,3,4,5,6-Hexachlorocyclohexane
11		1,2,3,4,5,6-Hexachlorocyclohexane
12		1,2,3,4,5,6-Hexachlorocyclohexane
13		1,2,3,4,5,6-Hexachlorocyclohexane
14		1,2,3,4,5,6-Hexachlorocyclohexane
15		1,2,3,4,5,6-Hexachlorocyclohexane
16		1,2,3,4,5,6-Hexachlorocyclohexane
17		1,2,3,4,5,6-Hexachlorocyclohexane
18		1,2,3,4,5,6-Hexachlorocyclohexane
19		1,2,3,4,5,6-Hexachlorocyclohexane
20		1,2,3,4,5,6-Hexachlorocyclohexane
21		1,2,3,4,5,6-Hexachlorocyclohexane
22		1,2,3,4,5,6-Hexachlorocyclohexane
23		1,2,3,4,5,6-Hexachlorocyclohexane
24		1,2,3,4,5,6-Hexachlorocyclohexane
25		1,2,3,4,5,6-Hexachlorocyclohexane
26		1,2,3,4,5,6-Hexachlorocyclohexane
27		1,2,3,4,5,6-Hexachlorocyclohexane
28		1,2,3,4,5,6-Hexachlorocyclohexane
29		1,2,3,4,5,6-Hexachlorocyclohexane
30		1,2,3,4,5,6-Hexachlorocyclohexane
31		1,2,3,4,5,6-Hexachlorocyclohexane
32		1,2,3,4,5,6-Hexachlorocyclohexane
33		1,2,3,4,5,6-Hexachlorocyclohexane
34		1,2,3,4,5,6-Hexachlorocyclohexane
35		1,2,3,4,5,6-Hexachlorocyclohexane
36		1,2,3,4,5,6-Hexachlorocyclohexane
37		1,2,3,4,5,6-Hexachlorocyclohexane
38		1,2,3,4,5,6-Hexachlorocyclohexane
39		1,2,3,4,5,6-Hexachlorocyclohexane
40		1,2,3,4,5,6-Hexachlorocyclohexane
41		1,2,3,4,5,6-Hexachlorocyclohexane
42		1,2,3,4,5,6-Hexachlorocyclohexane
43		1,2,3,4,5,6-Hexachlorocyclohexane
44		1,2,3,4,5,6-Hexachlorocyclohexane
45		1,2,3,4,5,6-Hexachlorocyclohexane
46		1,2,3,4,5,6-Hexachlorocyclohexane
47		1,2,3,4,5,6-Hexachlorocyclohexane
48		1,2,3,4,5,6-Hexachlorocyclohexane
49		1,2,3,4,5,6-Hexachlorocyclohex

Sub
B

Inset
B2